

Name Date

## KIDS SCIENCE NEWS NETWORK

## **PURPOSE**

To learn how aerosols scatter light

#### **MATERIALS**

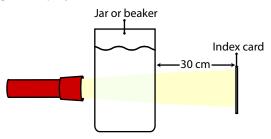
water

clear glass container such as a jar or beaker flashlight small amount of milk spoon white poster board 20 cm X 20 cm

# Blue, Blue, Where are You? Scattering Activity

### **PROCEDURE**

- 1. Fill the glass container 3/4 full with water.
- 2. Place the container on a flat surface and let the water become still.
- 3. Once the water is still, turn on the flashlight and shine it through the side of the container. Observe the beam of light from the side and from the end.
- 4. Hold the square of poster board in the other hand, placing it about 30 cm away from the container and directly opposite the beam of light. (See diagram.) Observe the light as it projects onto the board.



- 5. Add a spoonful of milk to the water and stir.
- 6. Repeat steps 3-5.
- 7. Continue to add spoonfuls of milk to the container until the light will no longer shines through the water.

### **CONCLUSION**

- 1. What color was the light as you viewed it through the container of clear water? What color was the light on the poster board?
- 2. Describe what happened when you added a spoonful of milk. Why?
- 3. Describe what happened as you continued to add milk? Why did this occur?
- 4. How can this experiment explain blue skies during the day and red skies at sunrise and sunset?